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FIG. 1

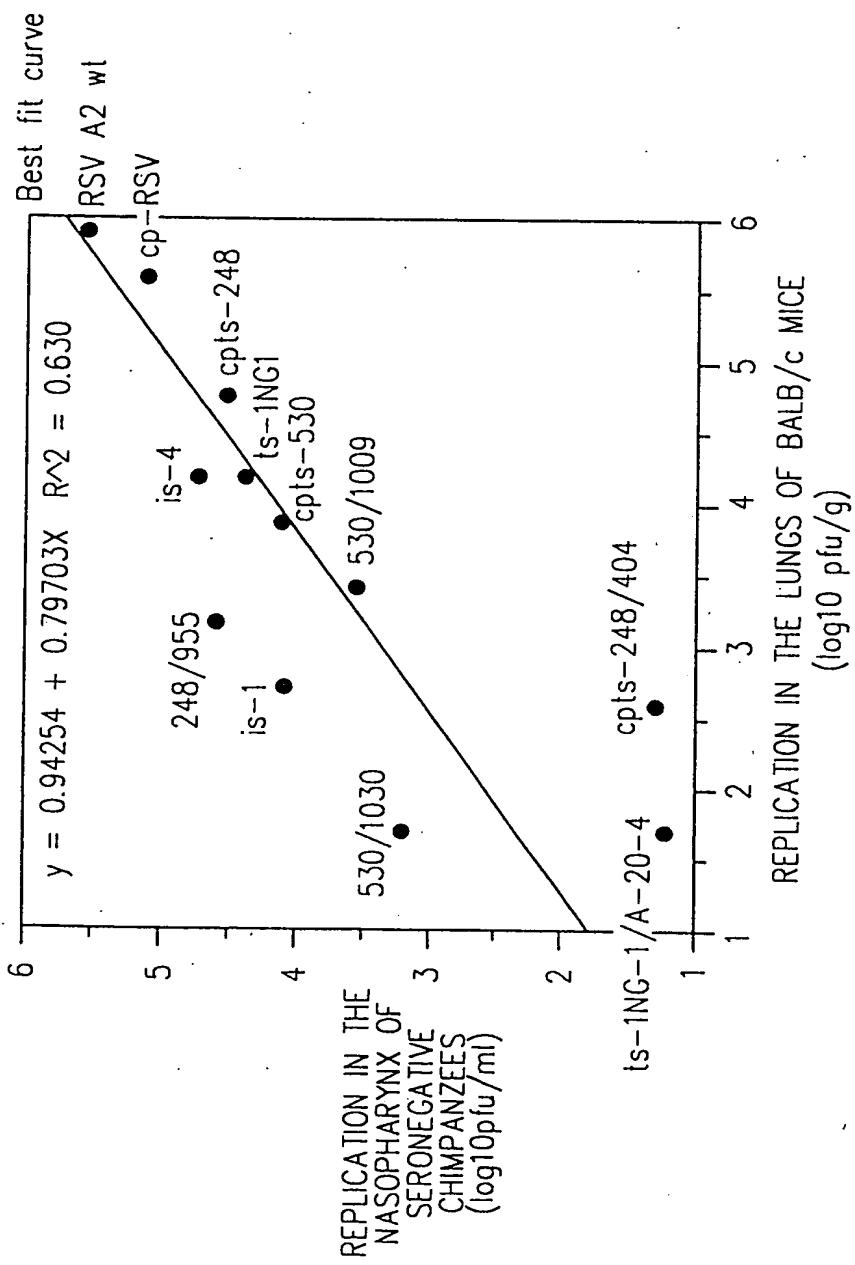


FIG. 2

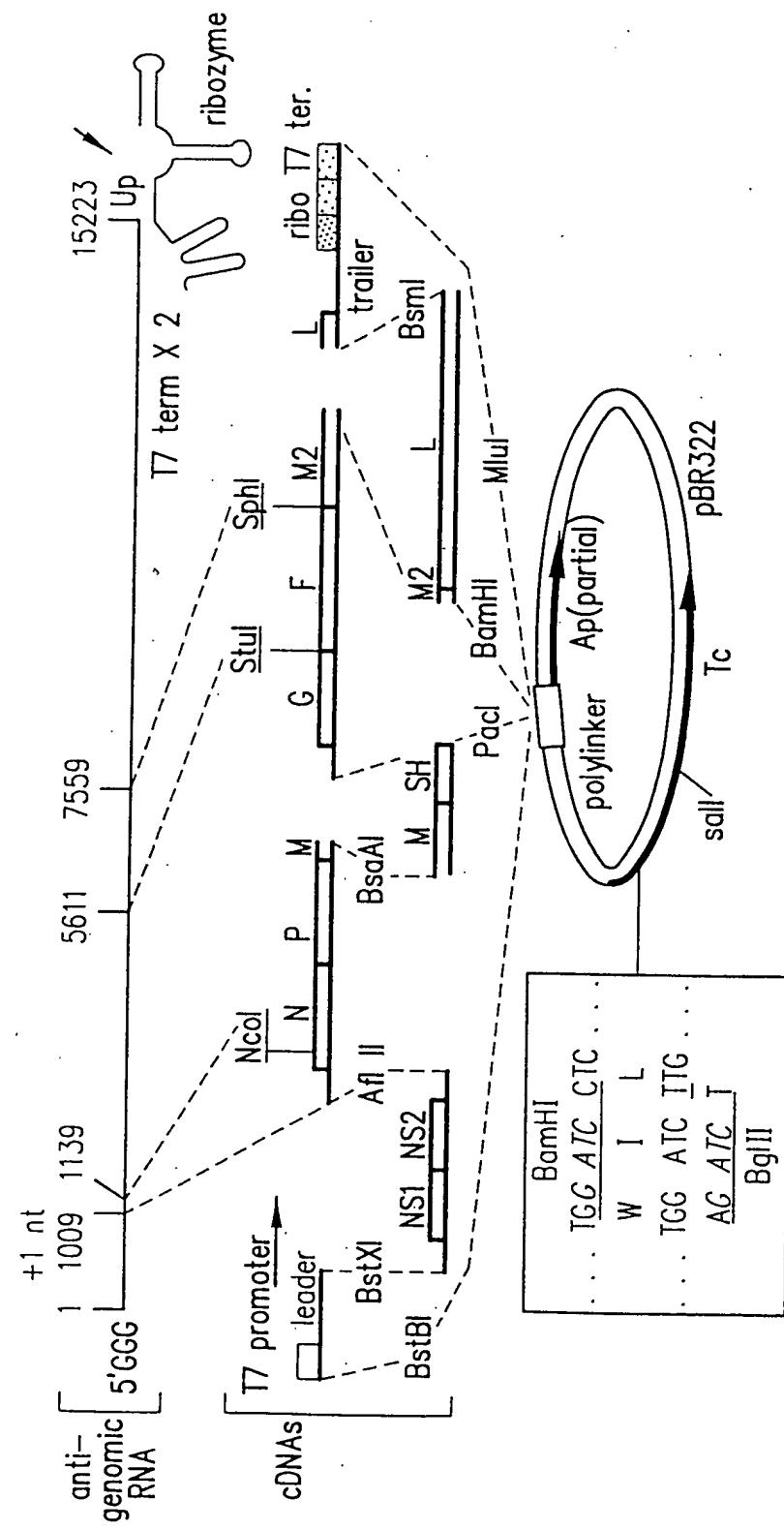


FIG. 3

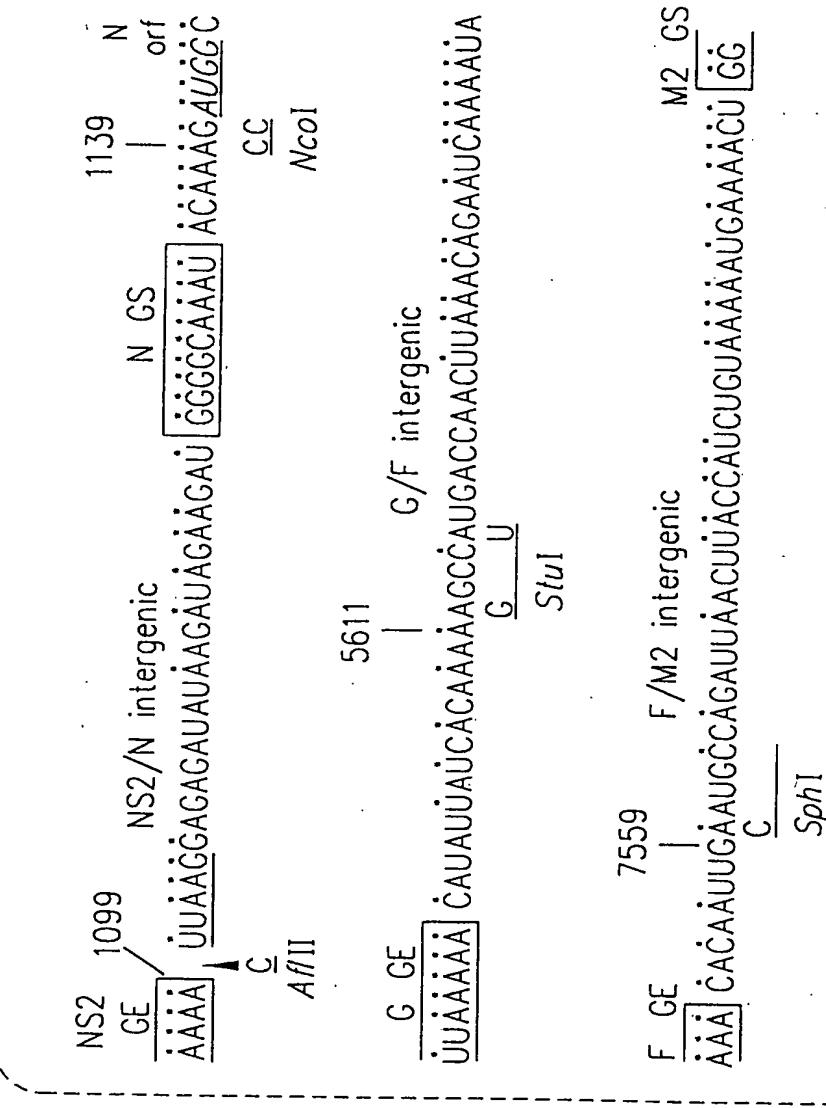


FIG. 4A

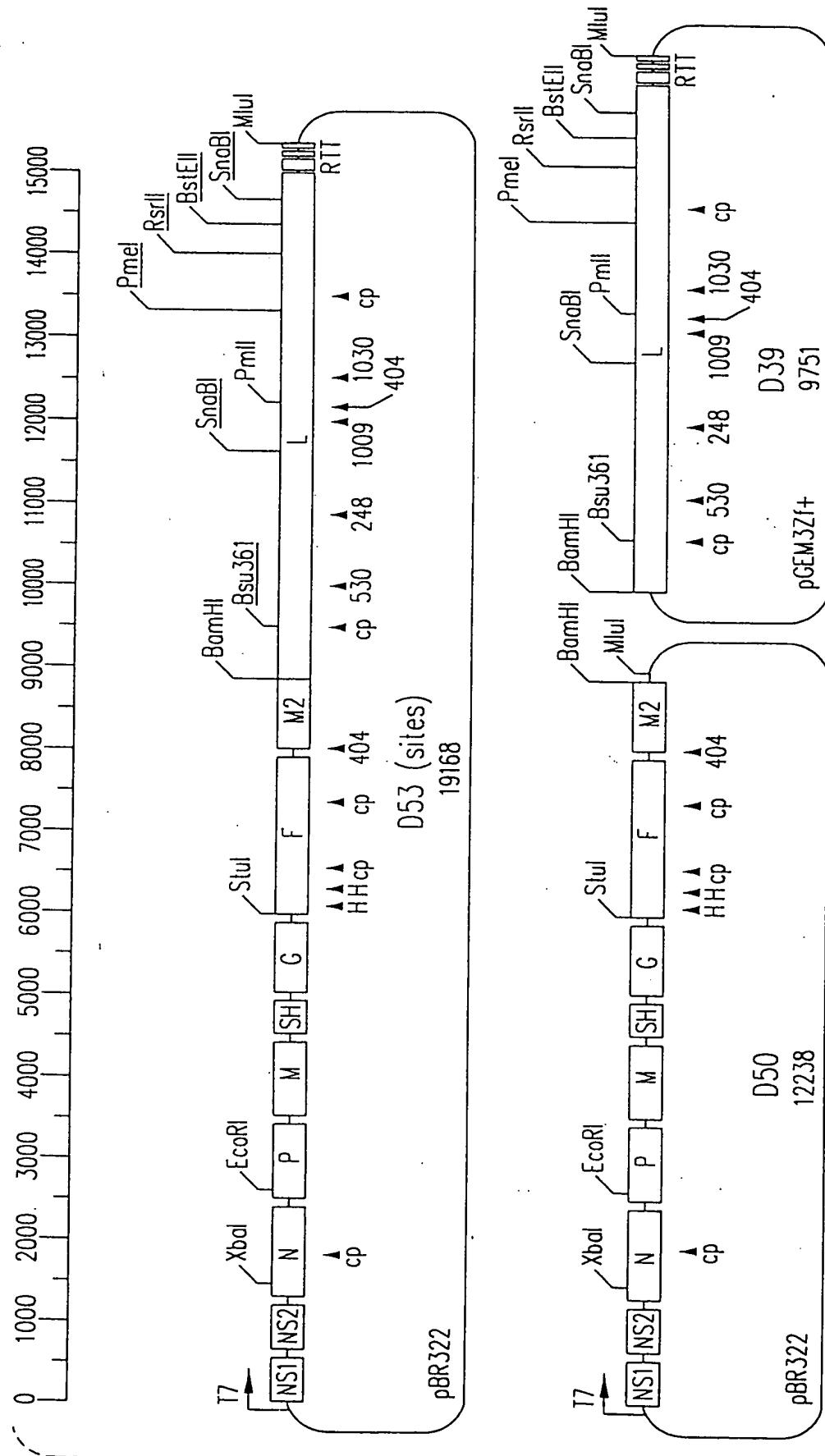


FIG. 4B

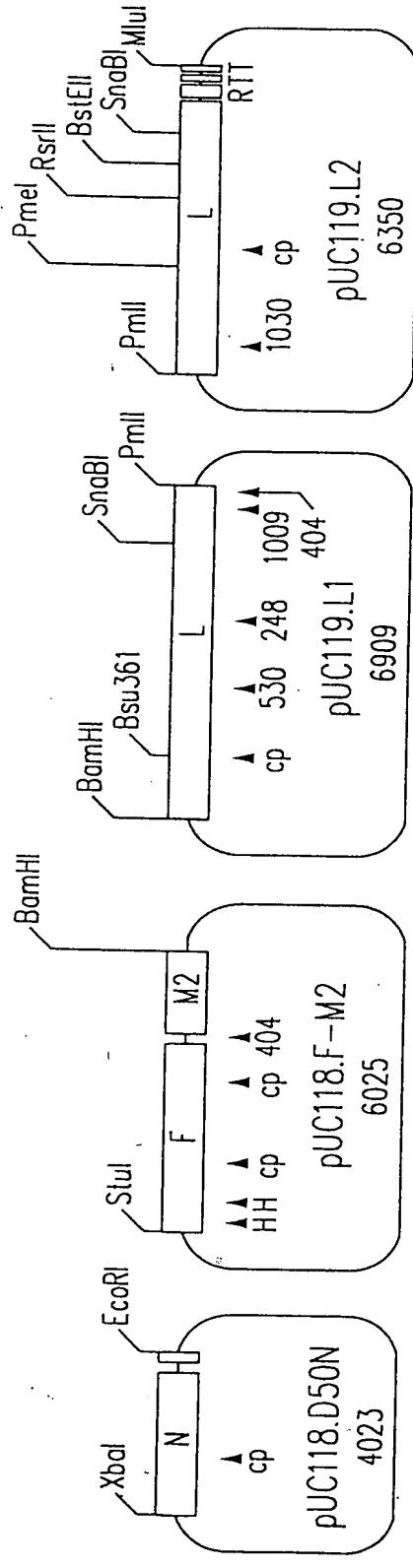


FIG. 5

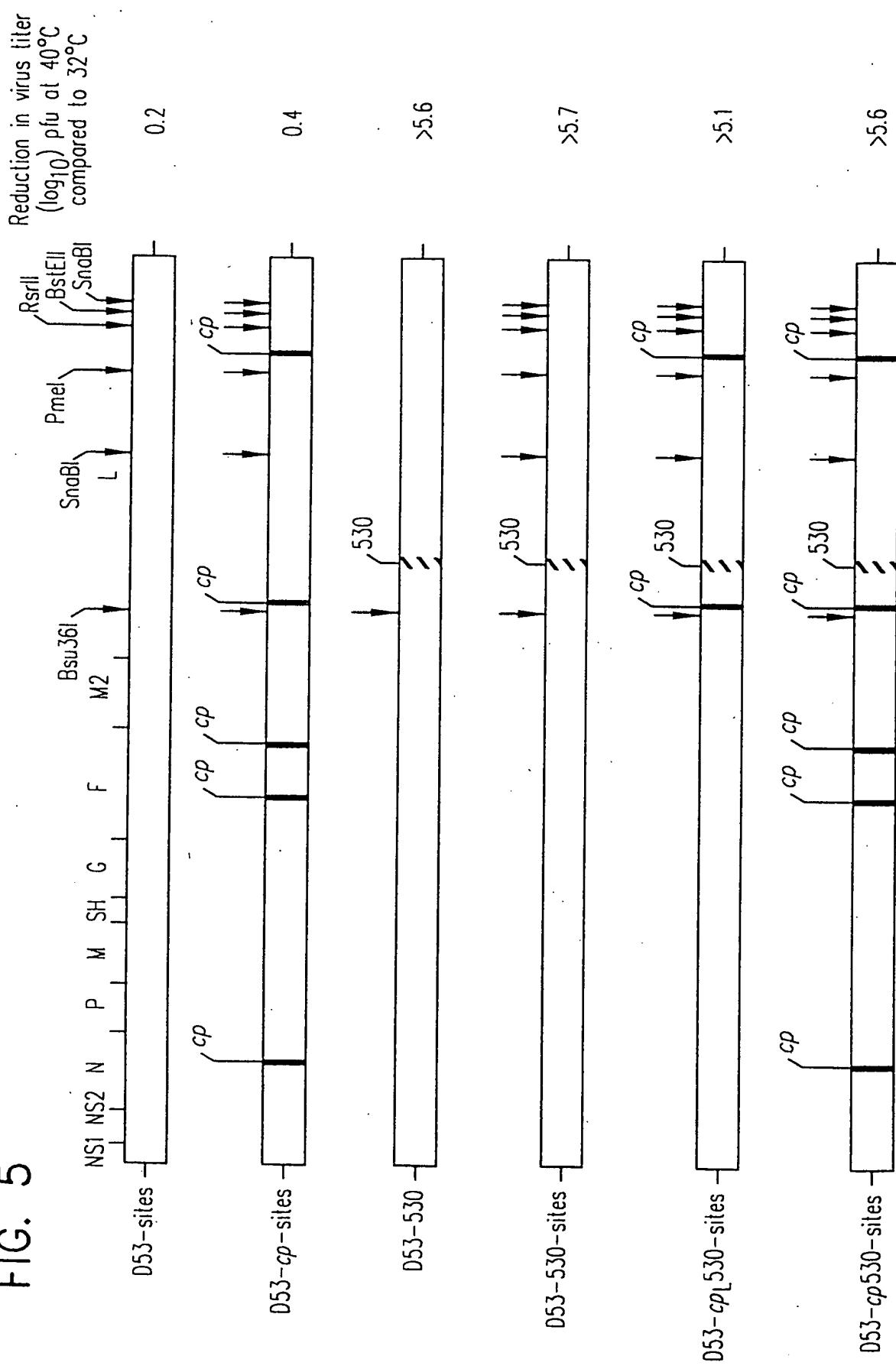


FIG. 6

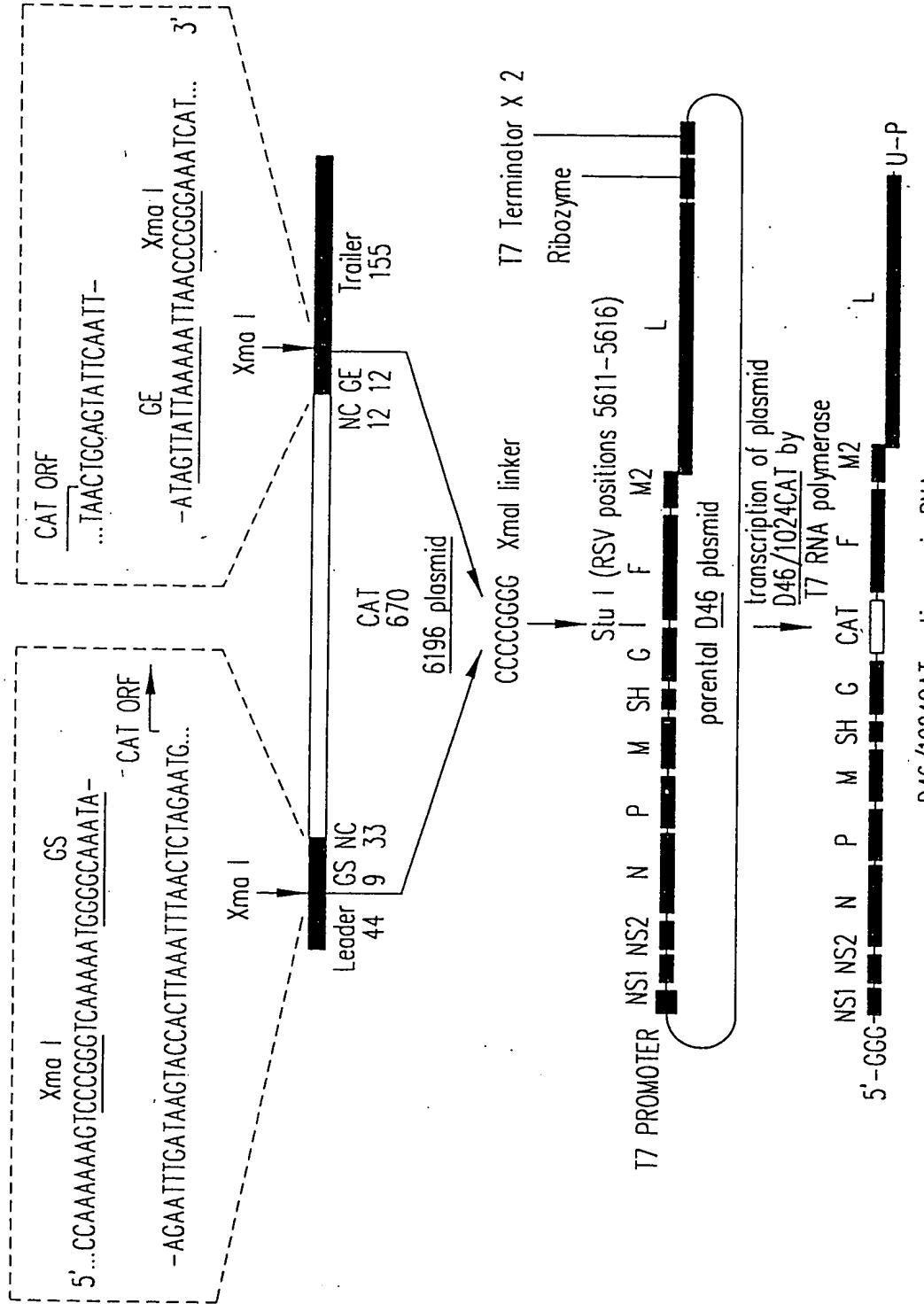


FIG. 7A

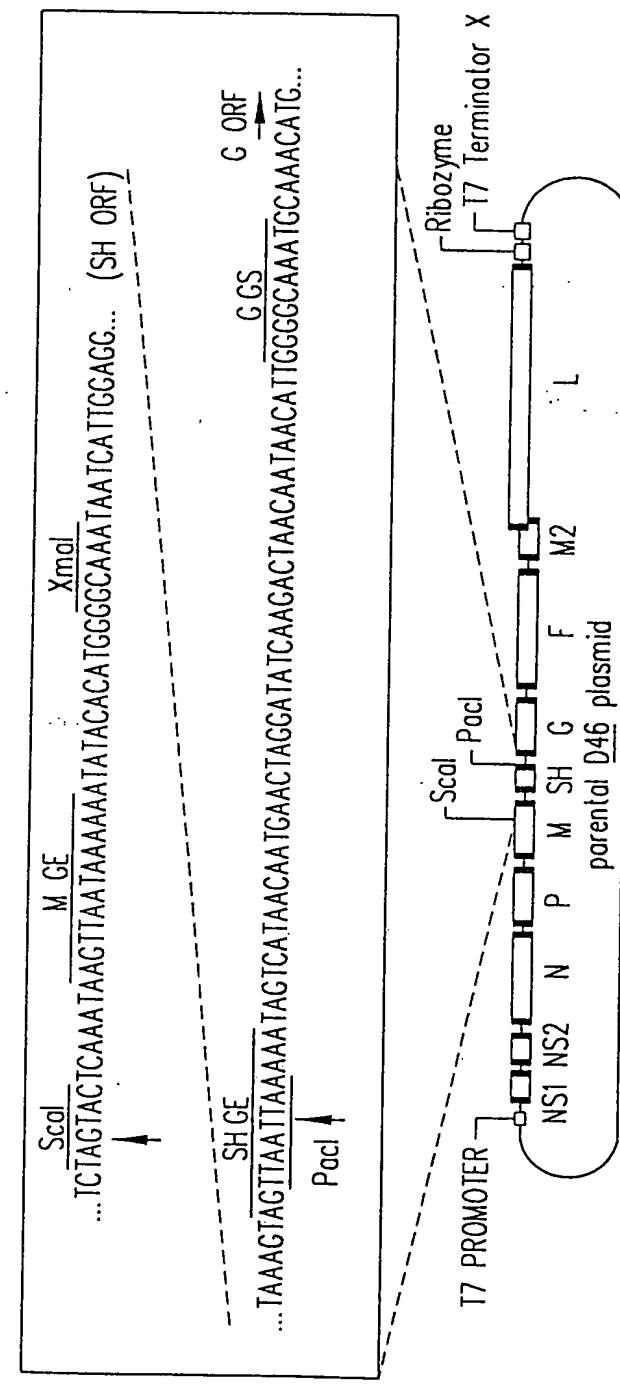


FIG. 7B

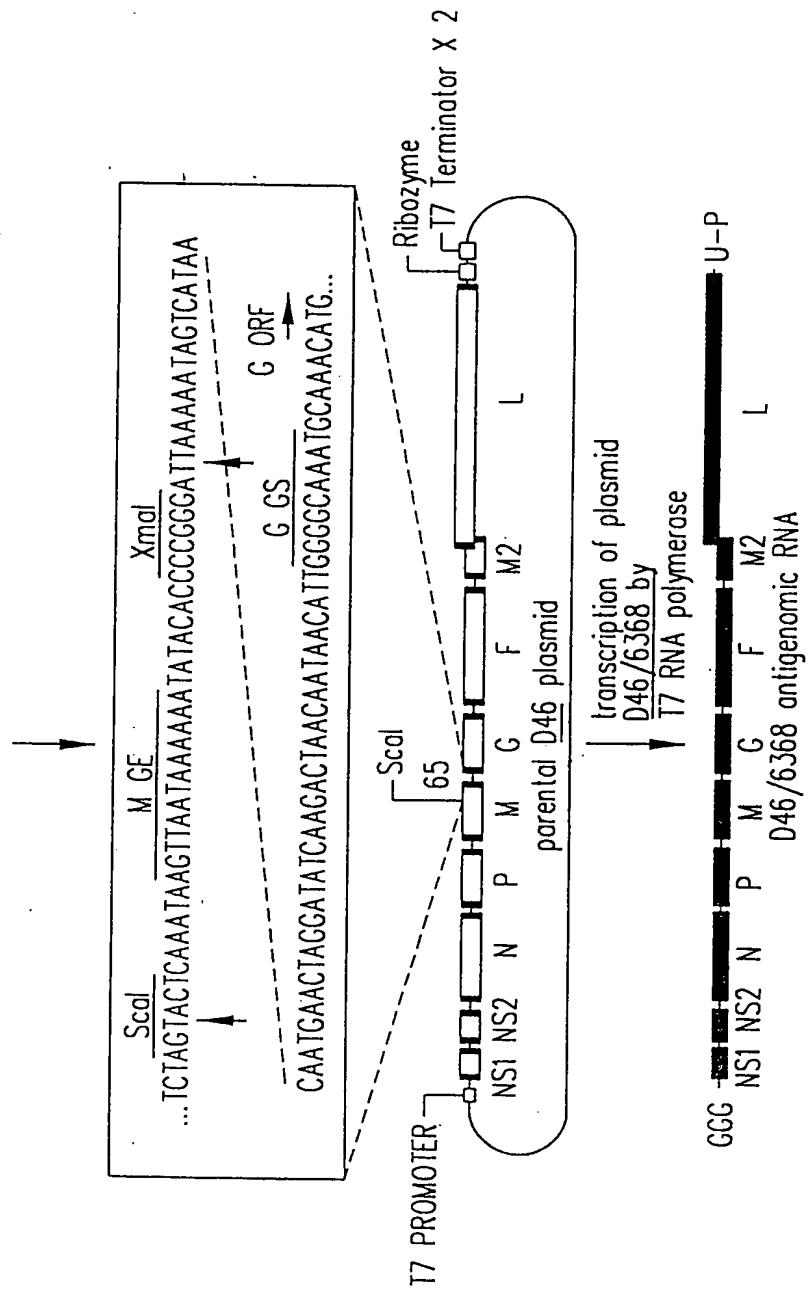


FIG. 9A

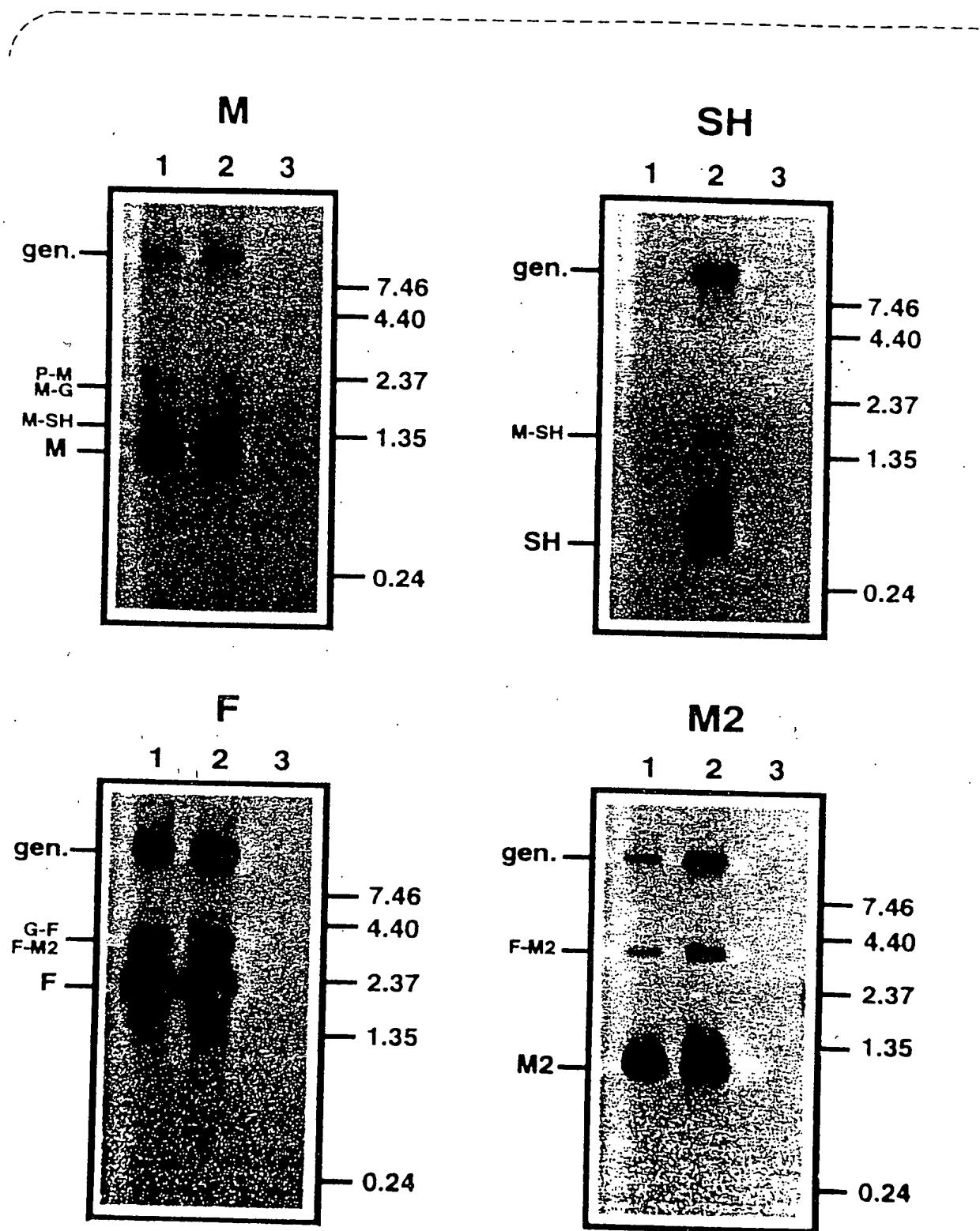


FIG. 9B

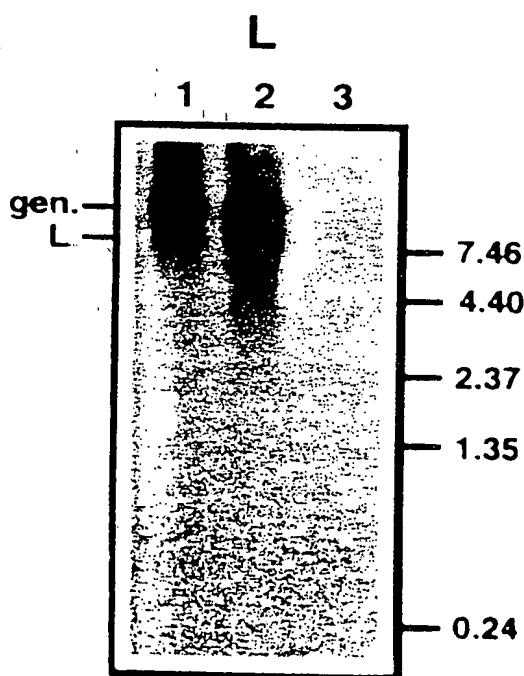
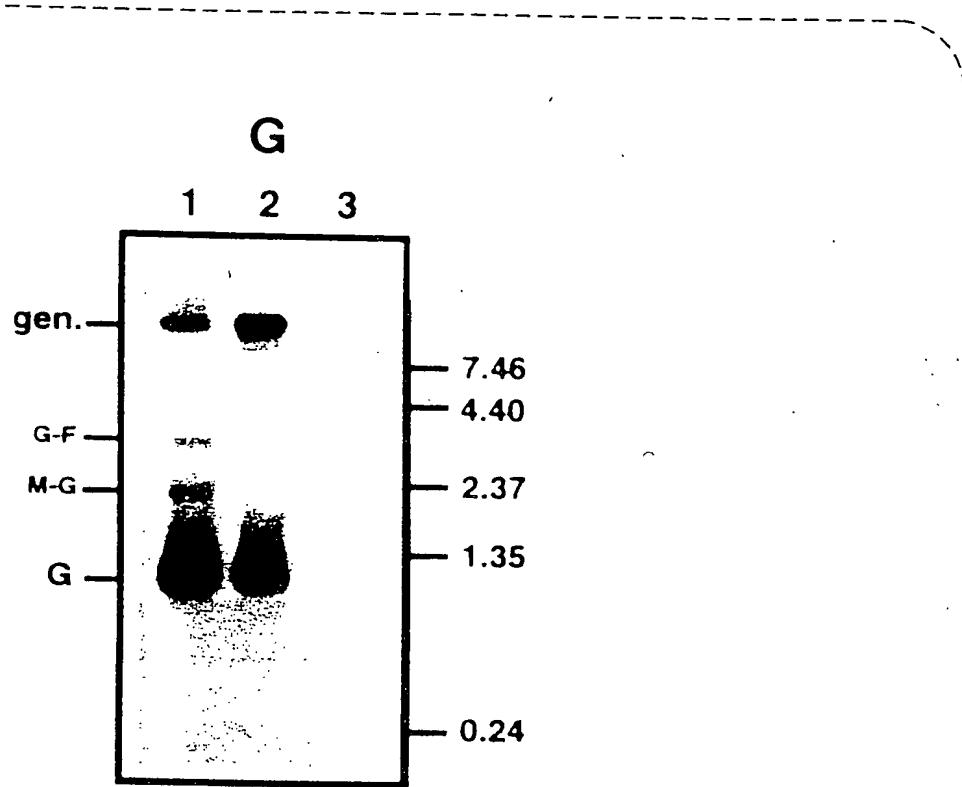


FIG. 8

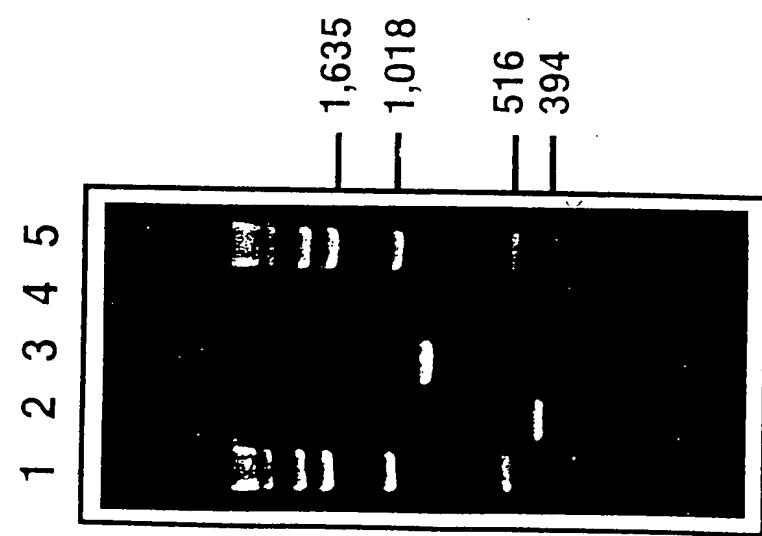


FIG. 10

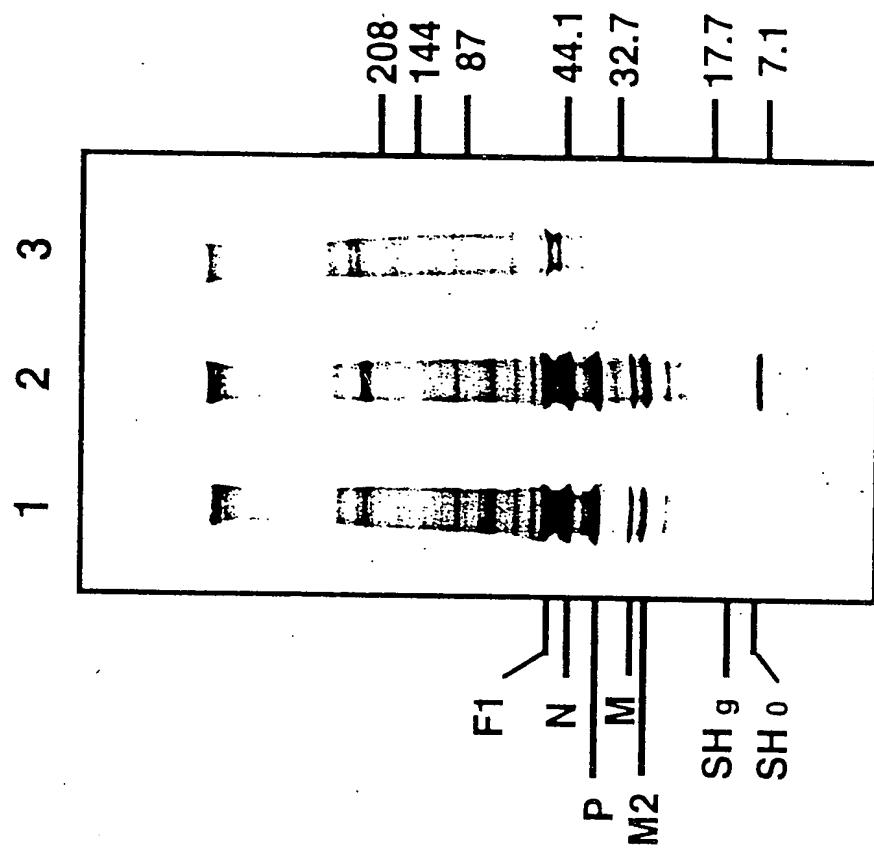


FIG. 11

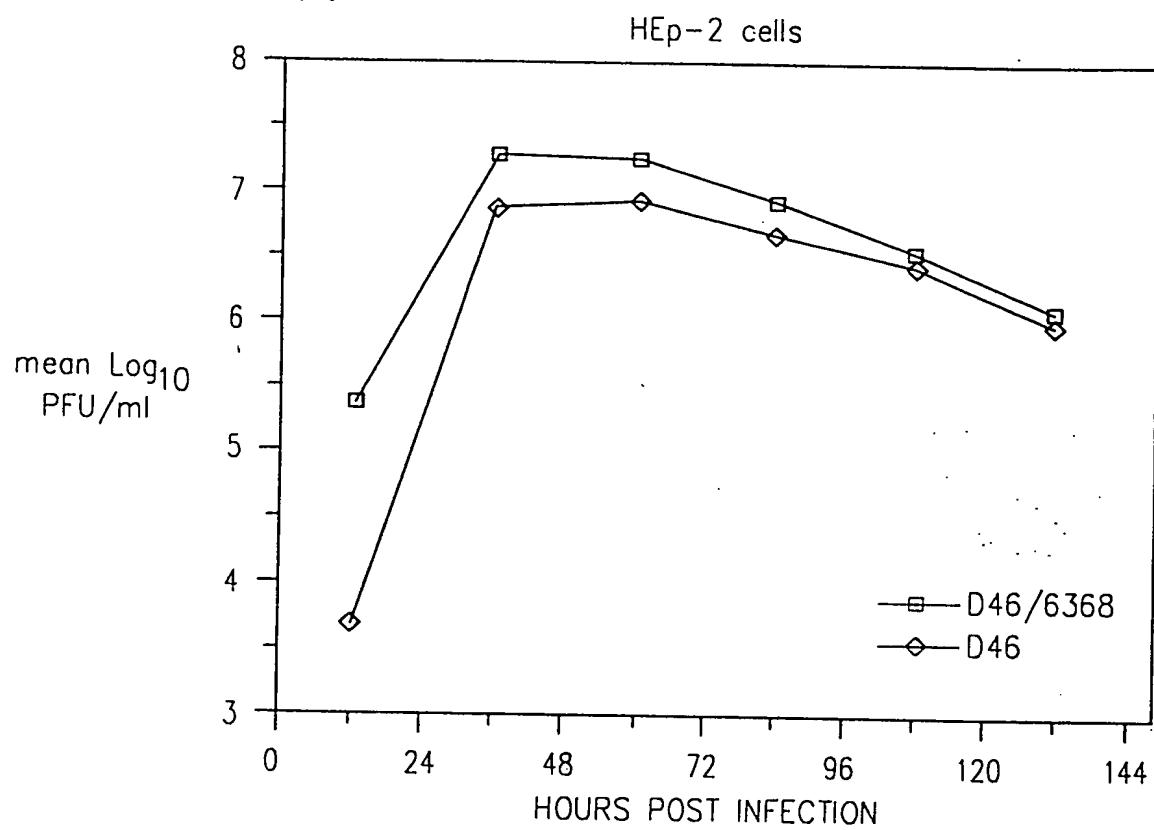


FIG. 12

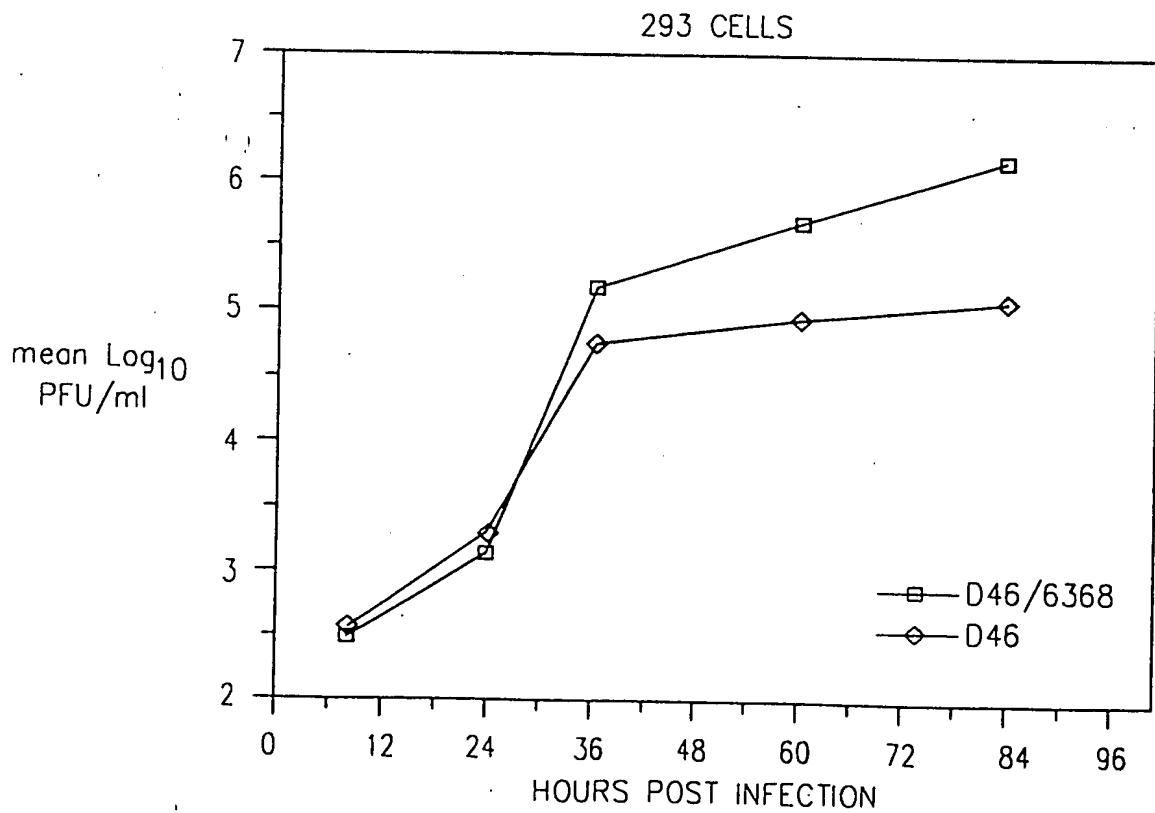


FIG. 13

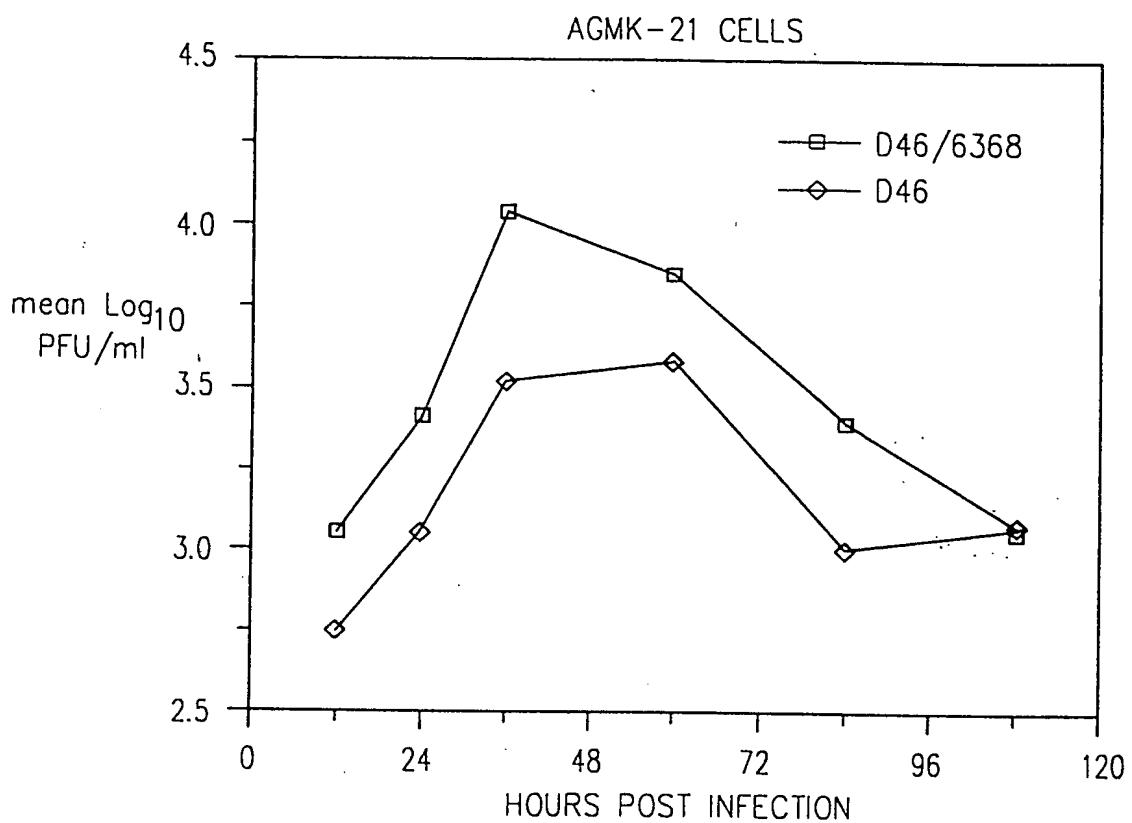


FIG. 14

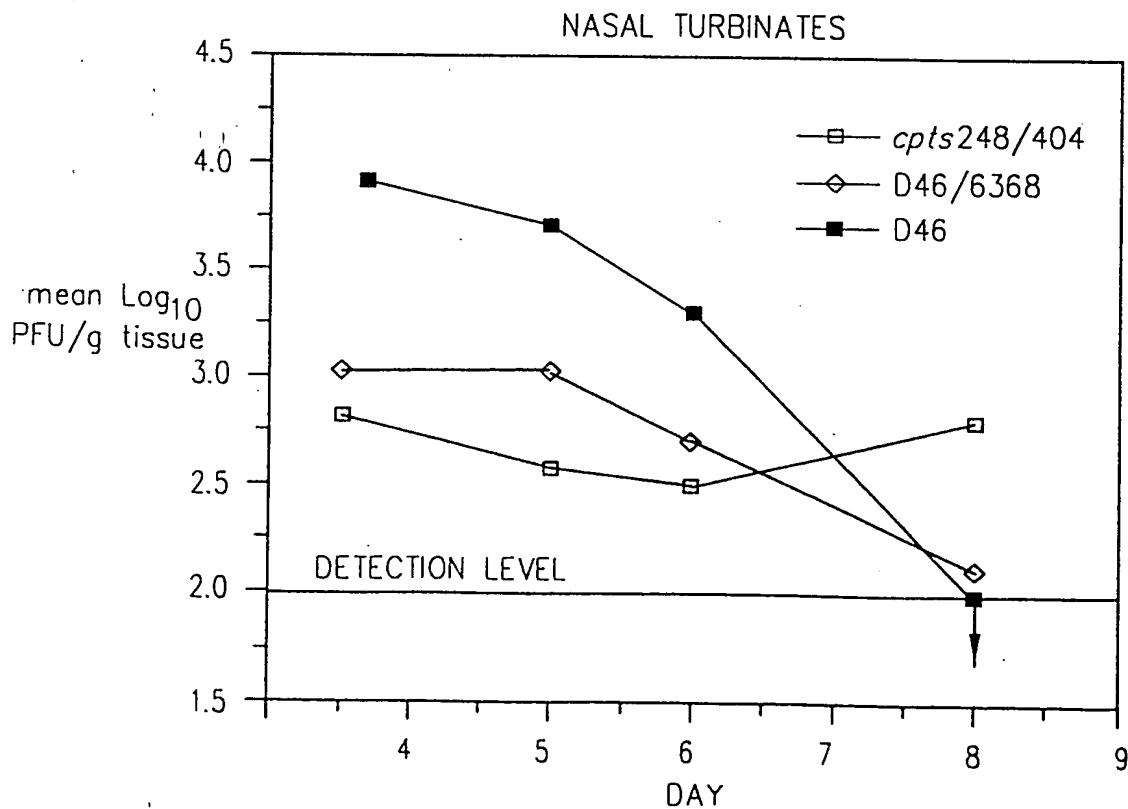


FIG. 15

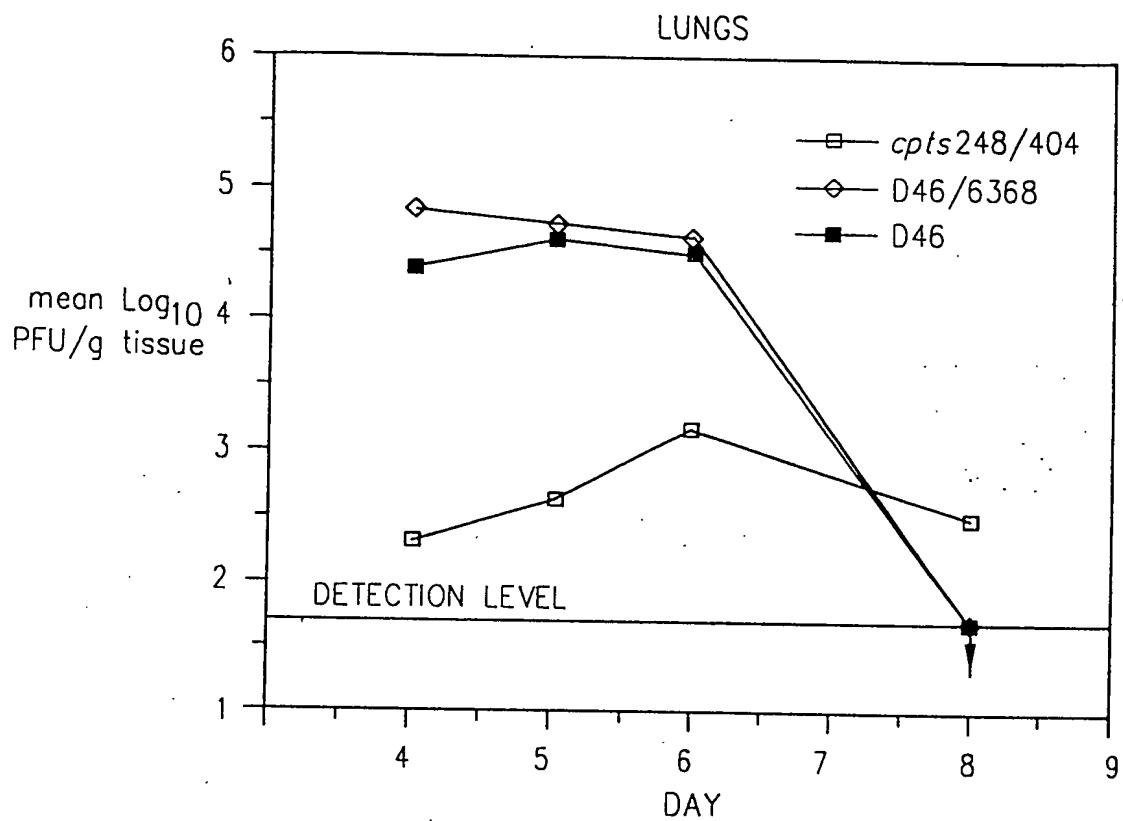


FIG. 16

The SH-minus mutant has a steeper gradient of polar transcription

Relative mRNA abundance: SH-minus/wild type				
M	G	F	M2	L
1.1	1.3	0.61	0.32	0.17

Positions of genes in 3'-5' map				
WT:	5	6	7	10
WT:	3'	-M-	SH-G-F-M2-L	
SH-minus:	5	6	9	
SH-minus:	3'	-M-----G-F-M2-L		

FIG. 17

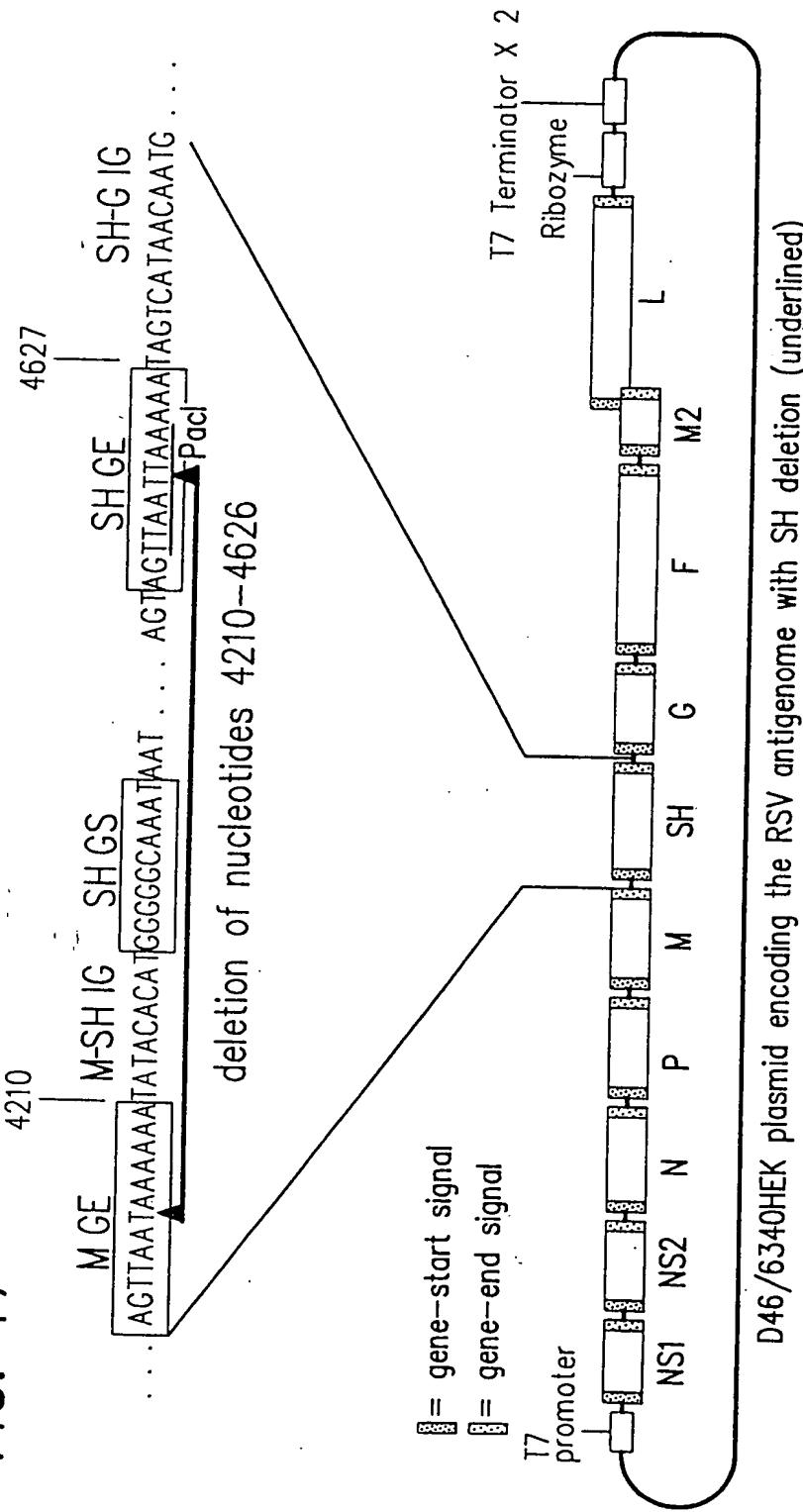


FIG. 18

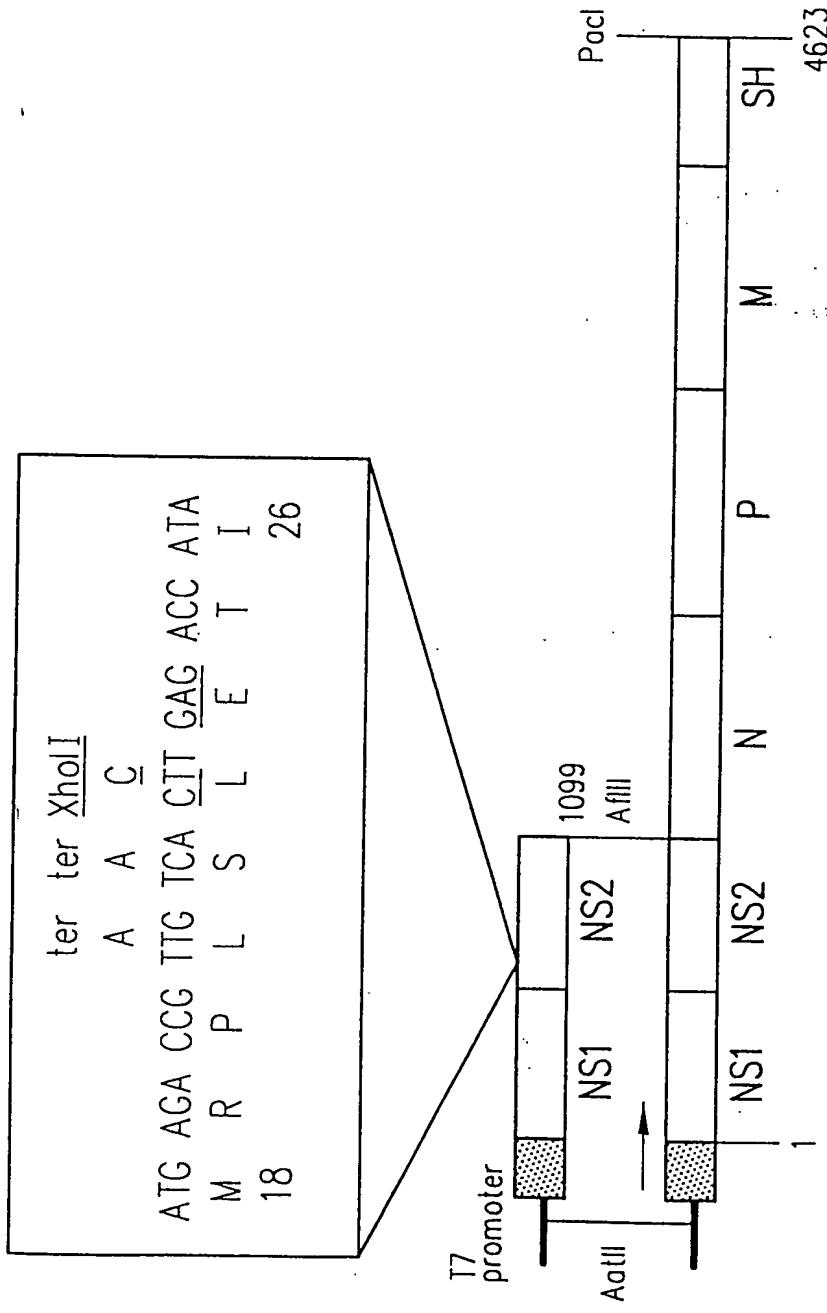


FIG. 19

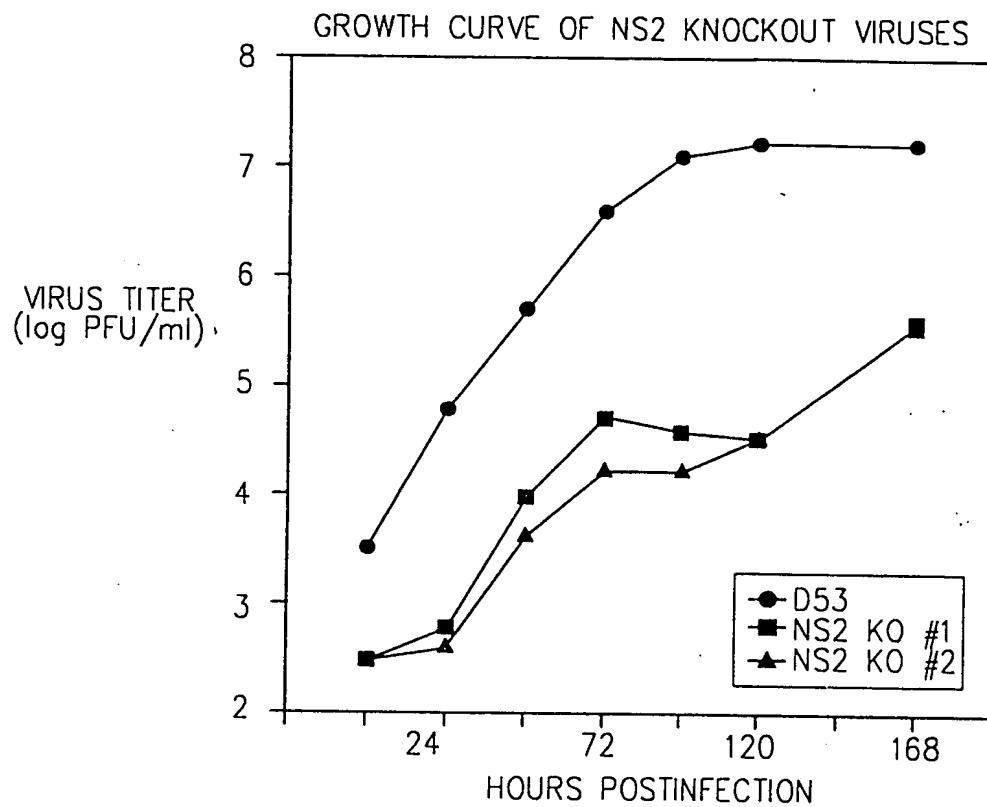


FIG. 24

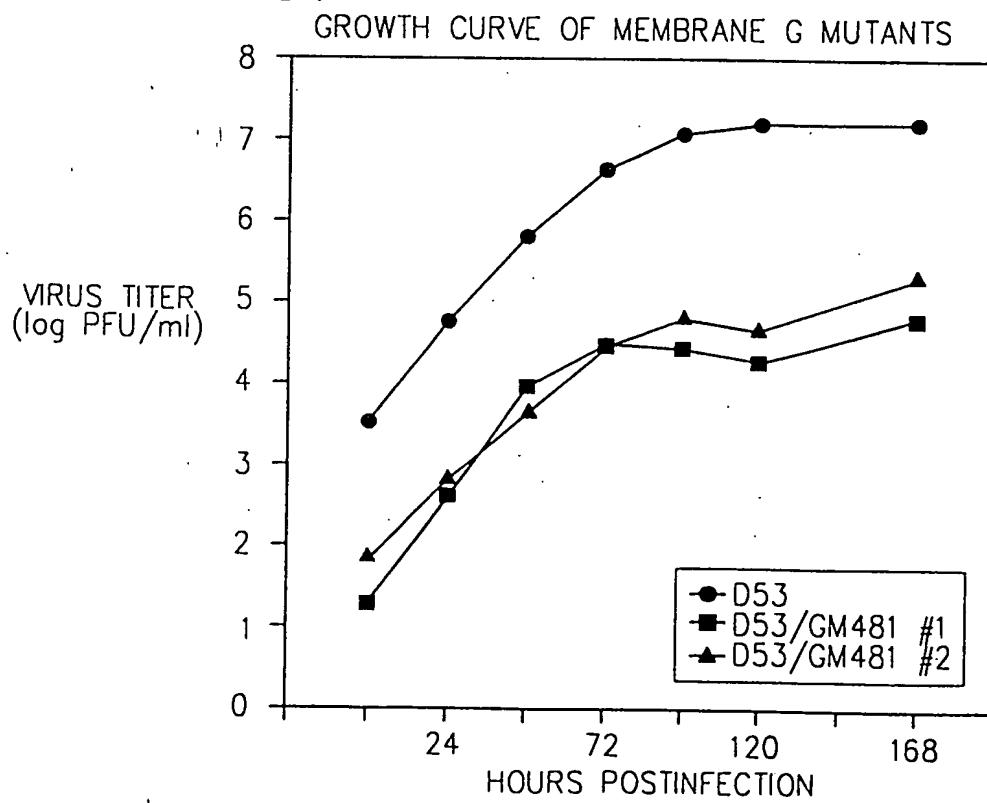


FIG. 20

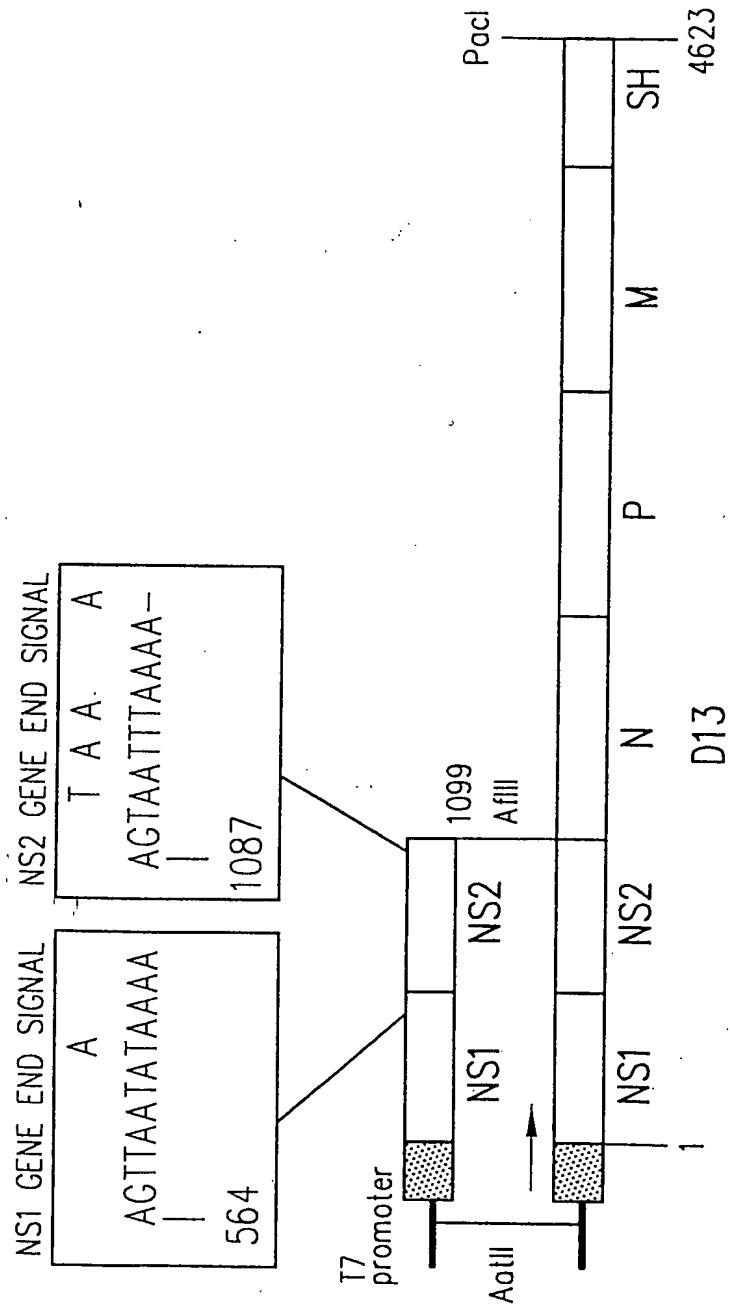


FIG. 21

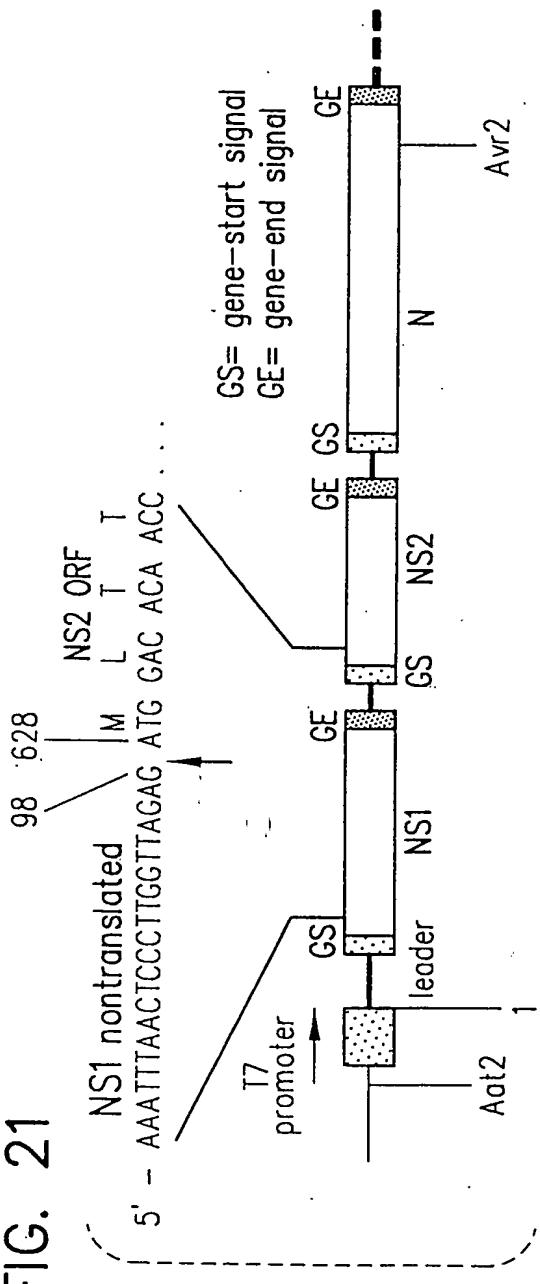


FIG. 22

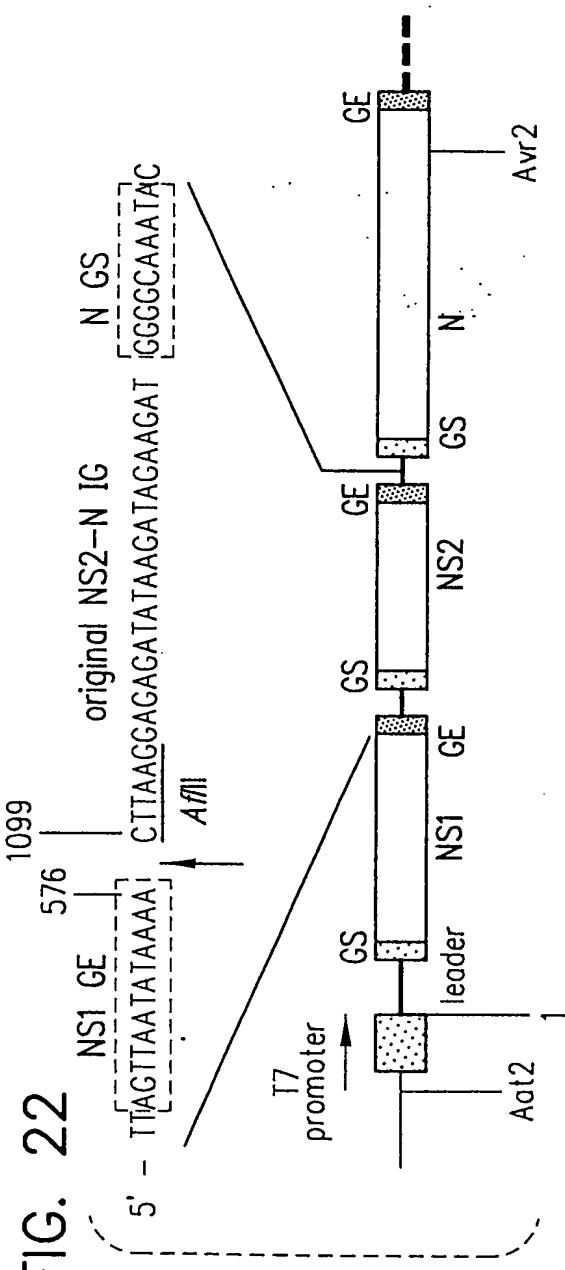


FIG. 23

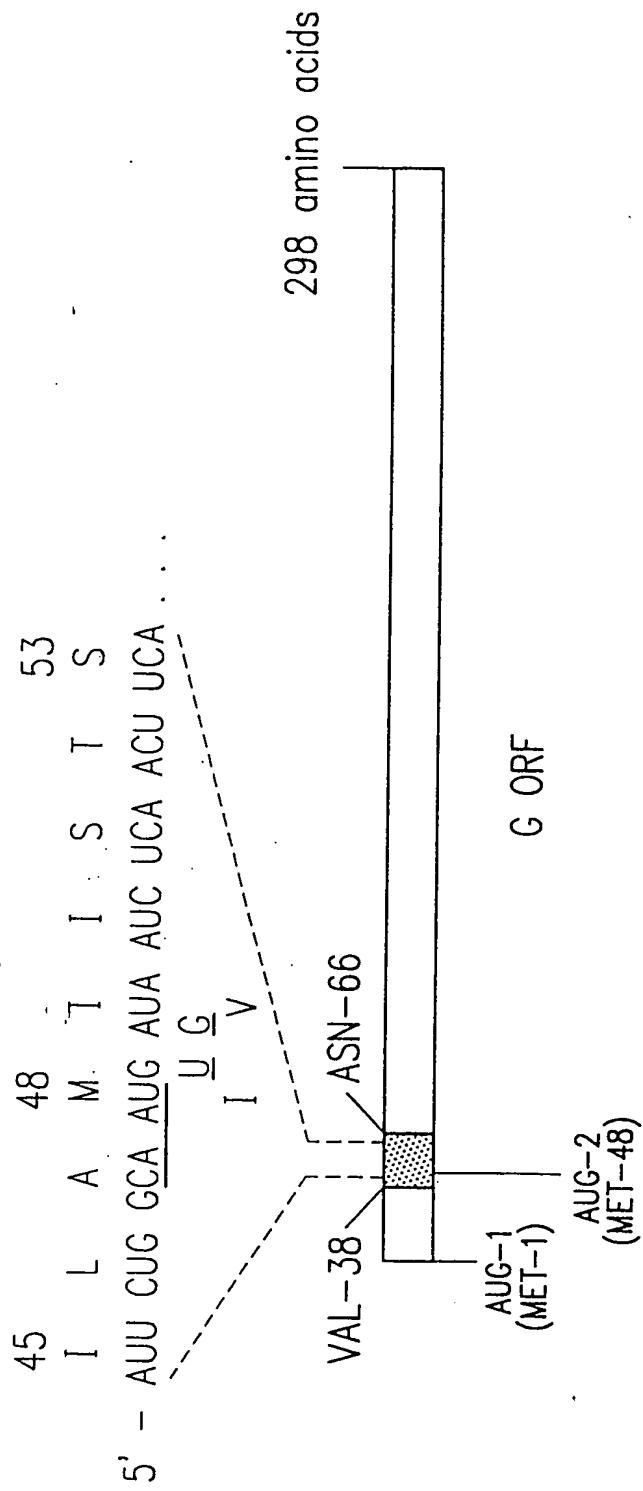


Fig. 25A

G and F genes of B1
virus of subgroup B

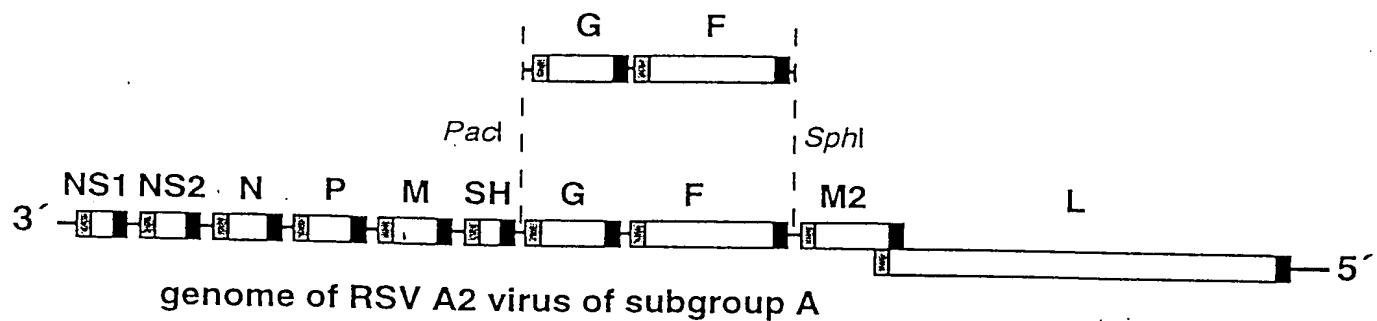


Fig. 25B

4630
SH GE | SH-G IG
...actataaaagtagttaataaaaatTAACATAATGATGAATTAT...
PacI

Fig. 25C

7559
F GE | F-M2 IG
...CTTAACTCATAGTTACATAAAAACCTCAAgcatgccagattaacttaccatctg...
SphI

Fig. 26

downstream G ORF

TCC AAC TCT ACT CAG AAC ACT CAG TCC CAC GCC TAATG
TCA AAT TCC ACC CAA AAT ACC CAA TCA CAT GCT T----
S N S T Q N T Q S H A -----
new wt

G-F intergenic

G gene-end

F gene-start

MfeI

AGTTATATAAAA-
AGTTATTCAAAAAA

CAATT
CTACA

GGGGCAAATAA... new
GGGGCAAATAA... wt

TCTTAGCAGAAACCGTGACCTATCAAGCAAGAACGAAATTAAACCT
47-nucleotide deletion

Fig. 27

